4163-18-P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

[30Day-22-21FC]

Agency Forms Undergoing Paperwork Reduction Act Review

In accordance with the Paperwork Reduction Act of 1995, the Centers for Disease Control and Prevention (CDC) has submitted the information collection request titled "Nurse Fatigue-Mitigation Education: Does it Change Nurse Sleep Behavior?" to the Office of Management and Budget (OMB) for review and approval. CDC previously published a "Proposed Data Collection Submitted for Public Comment and Recommendations" notice on May 14, 2021 to obtain comments from the public and affected agencies. CDC received four comments related to the previous notice. This notice serves to allow an additional 30 days for public and affected agency comments.

CDC will accept all comments for this proposed information collection project. The Office of Management and Budget is particularly interested in comments that:

(a) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(b) Evaluate the accuracy of the agencies estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(c) Enhance the quality, utility, and clarity of the information to be collected;

(d) Minimize the burden of the collection of information on those who are to respond, including, through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses; and

(e) Assess information collection costs.

To request additional information on the proposed project or to obtain a copy of the information collection plan and instruments, call (404) 639-7570. Comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review - Open for Public Comments" or by using the search function. Direct written comments and/or suggestions regarding the items contained in this notice to the Attention: CDC Desk Officer, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503 or by fax to (202) 395-5806. Provide written comments within 30 days of notice publication.

Proposed Project

Nurse Fatigue-Mitigation Education: Does it Change Nurse Sleep Behavior? – New - National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention (CDC).

Background and Brief Description

Many nurses in the United States work in around-the-clock healthcare facilities, providing necessary care to patients and the public. Providing these services requires nurses to work nonstandard hours, including shift work (e.g. early mornings, over-nights, rotating between days and nights) and long work hours. These work organizational characteristics are primary factors contributing to sleep-related fatigue, and decreased health and well-being for nurses. Studies have found 36% of healthcare workers (including nurses) report sleeping less than the recommended 7-9 hours of sleep/24 hours, with prevalence rates climbing to a little over 50% for those working night shift. This is concerning, as insufficient sleep not only increases the risk for a patient care error to occur but can also jeopardize the health of nurses.

In 2015, the National Institutes for Occupational Safety and Health (NIOSH) published a free, publicly available, online resource to address the risks associated with shift work and other nonstandard work hours. This program, "Training for Nurses

on Shift Work and Long Work Hours" provides information to nurses, nurse managers and other interested healthcare workers on the health and safety risks associated with nonstandard work hours. In addition, the training provides strategies for improving sleep and reducing fatigue-related risks when working shift work in the healthcare setting.

Over five years have passed since the training was published online. Since then, the nursing workforce has faced a changing healthcare landscape. In response, the two studies in this project have been designed to evaluate the effectiveness of the NIOSH Training for Nurses at improving nurses' sleep and well-being, as well as assess the reach of training dissemination. This evaluation project will help NIOSH determine gaps in training distribution, identify needs to enhance training content and ensure the training is meeting its purpose.

This evaluation project consists of 2 studies. Part 1: Part 1 goal is to provide a description of the registered nurses (RNs) who have already completed the NIOSH "Training for Nurses on Shift Work and Long Work Hours." Part 1 will be a secondary analysis of pre-existing CDC data from individuals who have received continuing professional licensing education credits following the NIOSH nurse training completion. There are no associated burden hours with Part 1 since data were previously collected by CDC.

Part 2: Part 2 goal is to evaluate the effectiveness of the NIOSH nurse training on objective (i.e., sleep duration,

efficiency, and timing with actigraphy watches) and subjective (i.e., sleep quality, daytime sleepiness) sleep health measures, and self-reported well-being. Part 2 will be a field study requiring recruitment of 50 RNs to volunteer to participate. Recruitment will take approximately three months through online platforms and with assistance of the nursing and health care connections through the NIOSH Health Care and Social Assistance Program, and NIOSH subject matter experts.

During Part 2, NIOSH will collect data before and after RNs complete the NIOSH Training for Nurses. RNs enrolled in the Part 2 study will be asked to complete online surveys and wear an actigraphy watch during this study. Actigraphy watches are research grade sleep activity data collection instruments, similar to a wristwatch. Actigraphy watches will be supplied by NIOSH for participant use during the study. As part of baseline measures, RNs will be asked to complete an online survey with questions about demographics, workplace characteristics (i.e., job tenure, shift length), sleep quality, daytime sleepiness, and well-being. In addition, RNs will be asked to wear an actigraphy watch and complete online daily sleep diaries for seven days.

One month after baseline measures, participants will be asked to take the NIOSH online nurse training. The training takes approximately 3.5 hours to complete and participants will have the opportunity to receive continuing education credits for professional licensure upon training completion. After the

online nurse training, participants will answer four immediate post-training online questions regarding behavioral intention and feedback on the participant training experience. The participant will then be scheduled for the one-month post-training data collection period.

At each post-training follow-up period, participants will be asked to follow the same sampling protocol they completed at baseline: online survey (i.e., sleep quality, daytime sleepiness, wellbeing) and seven-day actigraphy and sleep/wake diary. Participants will also be asked three open-ended questions about adopted behavior strategies to improve sleep, as well as facilitators and barriers to adoption.

Data collected during Part 2 will allow us to compare sleep and well-being measures at baseline with 1-, 3-, and 6-months post-training. We will also examine the relationship between nurse characteristics (e.g. age, work tenure) and behavioral intention, and the relationship between behavioral intention and sleep health post-training at 1-month, 3-months, and 6-months.

CDC requests OMB approval for an estimated 341 annual burden hours. There are no costs to respondents other than their time to participate.

Estimated Annualized Burden Hours

Type of Respondents	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)

Registered Nurses	Baseline Survey	50	1	23/60
	Online Nurses Training	50	1	3.5
	Immediate Post-Training Survey	50	1	7/60
	Post-Training (1-, 3-, and 6-month) Surveys	50	3	16/60
	Consensus Sleep Diary	50	4	21/60
	Actigraphy Watch Training	50	1	10/60
	Actigraphy Watch Fitting	50	4	7/60

Jeffrey M. Zirger,
Lead,
Information Collection Review Office,
Office of Scientific Integrity,
Office of Science,
Centers for Disease Control and Prevention.